Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-143 (Cancelled)

144 (Previously Presented). A method of identifying and producing a peptide that interacts with a ligand that interacts with a discontinuous epitope of a single biological unit consisting of a protein, or consisting of two or more proteins that interact to form a complex, the method comprising:

(a) providing a plurality of DNA fragments consisting of fragments, each of which appears in a DNA sequence that encodes the single biological unit;

(b) creating a library consisting of oligonucleotides from said plurality of DNA fragments, each said oligonucleotide comprising at least two of said fragments, said fragments being randomly ligated such that any oligonucleotide in the library can ligate with any other oligonucleotide in the library;

(c) inserting each of said oligonucleotides from said library of oligonucleotides into an expression system;

(d) causing the peptides encoded by said oligonucleotides to be expressed;

(e) screening the expressed peptides for interaction with a ligand that interacts with a discontinuous epitope of said single biological unit;

(f) identifying any peptide which so interacts; and

(g) producing any peptide so identified.

145 (Previously Presented). A method in accordance with claim 144, wherein said procedure of (a) comprises cutting said DNA sequence to form said plurality of DNA fragments.

146 (Previously Presented). A method in accordance with claim 145, wherein said cutting is accomplished enzymatically.

147 (Previously Presented). A method in accordance with claim 145, wherein said cutting is accomplished mechanically.

148 (Previously Presented). A method in accordance with claim 144, wherein said procedure of (a) comprises synthesizing said plurality of DNA fragments.

149 (Previously Presented). A method in accordance with claim 144, wherein said procedure of (b) comprises randomly ligating said plurality of DNA fragments to one another to form at least one ligated fragment and at least partially digesting said at least one ligated fragment to form said library of oligonucleotides.

150 (Previously Presented). A method in accordance with claim 144, wherein said expression system comprises a plurality of bacteria and said procedure of (c) comprises inserting one oligonucleotide from said library of oligonucleotides into each of said plurality of bacteria.

151 (Previously Presented). A method in accordance with claim 144, wherein said expression system comprises a plurality of phages and said procedure of (c) comprises inserting one oligonucleotide from said library of oligonucleotides into each of said plurality of phages.

152 (Previously Presented). A method in accordance with claim 151, wherein said oligonucleotides are inserted into said phages by cloning said oligonucleotides into phage genes coding for a coat protein.

153 (Previously Presented). A method in accordance with claim 152, wherein said phages are filamentous phages and said coat protein is pIII or pVIII.

154 (Previously Presented). A method in accordance with claim 144, wherein said expression system comprises an eukaryotic expression system and said procedure of (c) comprises inserting said library of oligonucleotides into eukaryotic expression vectors and inserting said vectors into said eukaryotic expression system.

155 (Previously Presented). A method in accordance with claim 144, wherein said single biological unit is a protein.

156 (Previously Presented). A method in accordance with claim 144, wherein said single biological unit is two or more proteins which interact to form a complex.

157-158 (Cancelled).

159 (Previously Presented). A method of preparing a library of peptides that can be screened to find peptides that interact with ligands that interact with discontinuous epitopes of a single biological unit consisting of a protein, or consisting of two or more proteins thatinteract to form a complex, comprising:

(a) providing a plurality of DNA fragments consisting of fragments, each of which appears in a DNA sequence that encodes the single biological unit;

(b) creating a library consisting of oligonucleotides from said plurality of DNA fragments, each said oligonucleotide comprising at least two of said fragments, said fragments being randomly ligated such that any oligonucleotide in the library can ligate with any other oligonucleotide in the library;

(c) inserting each of said oligonucleotides from said library of oligonucleotides into an expression system; and

(d) causing the peptides encoded by said oligonucleotides to be expressed, thereby preparing a library of peptides.

160 (Previously Presented). A method in accordance with claim 159, wherein said procedure of (a) comprises cutting said DNA sequence to form said plurality of DNA fragments.

161 (Previously Presented). A method in accordance with claim 160, wherein said cutting is accomplished enzymatically.

162 (Previously Presented). A method in accordance with claim 160, wherein said cutting is accomplished mechanically.

163 (Previously Presented). A method in accordance with claim 159, wherein said procedure of (b) comprises randomly ligating said plurality of DNA fragments to one another to form at least one ligated fragment and at least partially digesting said at least one ligated fragment to form said library of oligonucleotides.

164 (Previously Presented). A method in accordance with claim 159, wherein said expression system comprises a plurality oligonucleotide from bacteria and said procedure of (c) comprises inserting one of said library of oligonucleotides into each of said plurality of bacteria.

165 (Previously Presented). A method in accordance with claim 159, wherein said expression system comprises a plurality of phages and said procedure of (c) comprises inserting one oligonucleotide from said library of oligonucleotides into each of said plurality of phages.

166 (Previously Presented). A method in accordance with claim 165, wherein said oligonucleotides are inserted into said phages by cloning said oligonucleotides into phage genes coding for a coat protein.

167 (Previously Presented). A method in accordance with claim 166, wherein said phages are filamentous phages and said coat protein is pIII or pVIII.

168 (Previously Presented). A method in accordance with claim 159, wherein said expression system comprises an eukaryotic expression system and said procedure of (c) comprises inserting said library of oligonucleotides into eukaryotic expression vectors and inserting said vectors into said eukaryotic expression system.

169 (Previously Presented). A method in accordance with claim 159, wherein said single biological unit is a protein.

170 (Previously Presented). A method in accordance with claim 159, wherein said single biological unit is two or more proteins which interact to form a complex.

171-176 (Cancelled).

177 (Previously Presented). A method in accordance with claim 144, wherein each of said DNA fragments of (a) has a size of about 50 to about 150 base pairs.

178 (Cancelled).

179 (Previously Presented). A method in accordance with claim 159, wherein each of said DNA fragments of (a) has a size of about 50 to about 150 base pairs.

180-182 (Cancelled).

183 (Currently Amended). A method of identifying and producing a peptide that interacts with a ligand that interacts with a discontinuous epitope of a single biological unit consisting of a protein, or consisting of two or more

proteins that interact to form a complex, the method comprising:

(a) providing a plurality of DNA fragments consisting of fragments, each of which appears in a DNA sequence that encodes the single biological unit;

(b) creating a library consisting of oligonucleotides from said plurality of DNA fragments, each said oligonucleotide comprising at least two of said fragments, said fragments being randomly ligated,

wherein said providing and creating steps are accomplished such that none of the oligonucleotides created thereby encode said original single biological unit;

(c) inserting each of said oligonucleotides from said library of oligonucleotides into an expression system;

(d) causing the peptides encoded by said oligonucleotides to be expressed;

(e) screening the expressed peptides, none of which are the single biological unit, for interaction with a ligand that interacts with a discontinuous epitope of said single biological unit;

(f) identifying any peptide which so interacts; and

(g) producing any peptide so identified.

184 (Previously Presented). A method of identifying and producing a peptide that interacts with a ligand that interacts with a discontinuous epitope of a single biological unit consisting of a protein having a single definable sequence, or consisting of two or more proteins, each having a single definable sequence, which proteins interact to form a complex, the method comprising:

(a) providing a plurality of DNA fragments consisting of fragments, each of which appears in a DNA sequence that encodes the single biological unit;

(b) creating a library consisting of oligonucleotides from said plurality of DNA fragments, each said oligonucleotide comprising at least two of said fragments, said fragments being randomly ligated;

(c) inserting each of said oligonucleotides from said library of oligonucleotides into an expression system;

(d) causing the peptides encoded by said oligonucleotides to be expressed;

(e) screening the expressed peptides for interaction with a ligand that interacts with a discontinuous epitope of said single biological unit;

(f) identifying any peptide which so interacts; and

(g) producing any peptide so identified.

185 (Previously Presented). A method of preparing a library of peptides that can be screened to find peptides that interact with ligands that interact with discontinuous epitopes of a single biological unit consisting of a protein having a single definable sequence, or consisting of two or more proteins, each having a single definable sequence, which proteins interact to form a complex, comprising:

(a) providing a plurality of DNA fragments consisting of fragments, each of which appears in a DNA sequence that encodes the single biological unit;

(b) creating a library consisting of oligonucleotides from said plurality of DNA fragments, each said oligonucleotide comprising at least two of said fragments, said fragments being randomly ligated;

(c) inserting each of said oligonucleotides from said library of oligonucleotides into an expression system; and

(d) causing the peptides encoded by said oligonucleotides to be expressed, thereby preparing a library of peptides.

186 (New). A method of preparing a library of peptides that can be screened to find peptides that interact with ligands that interact with discontinuous epitopes of a single biological unit consisting of a protein or consisting of two or more proteins that interact to form a complex, comprising:

(a) providing a plurality of DNA fragments consisting of fragments, each of which appears in a DNA sequence that encodes the single biological unit;

(b) creating a library consisting of oligonucleotides from said plurality of DNA fragments, each said oligonucleotide comprising at least two of said fragments, said fragments being randomly ligated;

(c) inserting each of said oligonucleotides from said library of oligonucleotides into an expression system; and

(d) causing the peptides encoded by said oligonucleotides to be expressed, thereby preparing a library of peptides,

wherein said providing and creating steps are accomplished such that none of the oligonucleotides created thereby encode said original single biological unit.

187 (New). A method in accordance with claim 144, wherein said providing and creating steps are accomplished such that none of the oligonucleotides created thereby encode said original single biological unit.

188 (New). A method in accordance with claim 159, wherein said providing and creating steps are accomplished such that none of the oligonucleotides created thereby encode said original single biological unit.

189 (New). A method in accordance with claim 184, wherein said providing and creating steps are accomplished such that none of the oligonucleotides created thereby encode said original single biological unit.

190 (New). A method in accordance with claim 185, wherein said providing and creating steps are accomplished such that none of the oligonucleotides created thereby encode said original single biological unit.

191 (New). A method in accordance with claim 144, wherein said single biological unit consists of a protein

having a single definable sequence, or consists of two or more proteins, each having a single definable sequence, which proteins interact to form a complex.

192 (New). A method in accordance with claim 159, wherein said single biological unit consists of a protein having a single definable sequence, or consists of two or more proteins, each having a single definable sequence, which proteins interact to form a complex.

193 (New). A method in accordance with claim 187, wherein said single biological unit consists of a protein having a single definable sequence, or consists of two or more proteins, each having a single definable sequence, which proteins interact to form a complex.

194 (New). A method in accordance with claim 188, wherein said single biological unit consists of a protein having a single definable sequence, or consists of two or more proteins, each having a single definable sequence, which proteins interact to form a complex.